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ABSTRACT

This exploratory study provides a foundation for research on socialization in Japanese schools, identifying types of cooperative and competitive student behavior as seen by teachers. The first of two surveys (each using two questionnaires) asked teachers to list examples of cooperative or competitive behavior. The second, designed from the responses to the first, asked a different sample to rank the top 10 of 30 behavior items; through factor and cluster analysis, these items were reduced to composite indexes. Of eight cooperation indexes, six changed ranking between school levels; "harmony" and friendliness were most important overall. Evidently, specific standardized activities foster cooperation, some particular to school level. Though it is unproven that such activities comprise a grand scheme for teaching cooperation, the Japanese school system clearly states goals for socialization. Of nine competition indexes, all changed ranking between school levels; in contrast to cooperative activities, few were sanctioned or formal. Issues raised include, first, the degree to which cooperative and competitive behavior stem from nonschool factors and from explicit or implicit curricula; and second, the interplay and social meaning of cooperation and competition in schools. (MCG)

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Cooperation and Competition in Japanese Schools: A Mirror for American Educators

Many Americans, noting its superior academic achievement, have recently placed the Japanese educational system on a pedestal. The Japanese example may offer some solutions to our current educational dilemmas. But to benefit from it, we must first do as the Japanese did long before they were "discovered" by American researchers. We must rationally examine our own priorities, and borrow only those ideas congruent with our own educational traditions and goals.

This paper will report exploratory findings and raise questions concerning moral socialization in the Japanese schools. The term "moral socialization" is defined by Bidwell (1972) and others as the process by which children learn societal goals and values. It is distinguished from "instrumental socialization", which concerns intellectual and academic skills. Undoubtably, the Japanese outperform American students instrumentally, through high school. Yet there are other "products" of the school experience than achievement, so our research sets out to document the non-instrumental side of Japanese school socialization. Without moral socialization, the Japanese citizenry would not apply the instrumental skills taught in school.

Cooperation and competition will be highlighted as key aspects of moral socialization. Our long-range goal is to discover how, during the school years, Japanese citizens are trained to be both selfless and fiercely rivalrous, and to consider how these phenomena differ in the American schools. Nine-hundred teachers were surveyed to document those cooperative and competitive school experiences which may provide the groundwork for adult Japanese interpersonal relations.

Methods

Survey One: Free Responses from Teachers

Three hundred schools (100 each of elementary, junior high and high schools) were randomly selected from 37,000 public schools contained in the Japanese National Listing of Schools (1981). Letters sent to each school's principal asked him to give questionnaires to any two teachers. Teachers were asked to "list some specific behaviors you see among your pupils which you believe are examples of cooperative [competitive] behavior..." One-hundred and two teachers responded, providing an initial pool of 453 cooperative and 418 competitive behavioral items.

Survey Two: Ranking of Behavioral Items

One-hundred and fifty previously unsampled schools (50 schools per level) were selected in the above-mentioned manner, and letters were sent to the principals. This time, however, principals were asked to distribute questionnaires to as many teachers as possible. These 30-item

questionnaires were developed by systematic screening of the Survey One free responses. Table 1 and Table 2 display the questionnaires given to teachers.

Insert Tables 1 and 2 about here

Teachers in these twin surveys were asked to rank order the "ten items which best represent a cooperative [competitive] pupil to you..." Responses were returned by mail from every geographical region in Japan, from large and small schools, and from a balance of urban and rural schools. 575 teachers completed cooperation questionnaires, and 326 teachers responded to the competition survey.

Results

Factor analysis using varimax rotation, and cluster analysis using the furthest neighbor method, revealed that the 30 items in the cooperation and competition questionnaires were reducable to eight and nine composite variables respectively.

The mean rankings of the composite variables and their sub-items are given in Tables 3 and 4 for the cooperation and competition surveys, respectively. These are presented for the overall samples and for each school level, along with F-values and significance levels for ANOVAs on school level effects.

Insert Tables 3 and 4 about here

Findings on Cooperation

Both similarities and discontinuities between school levels are apparent in analyses of variance. The findings on each of the eight cooperation composite variables are as follows.

Harmony. This composite variable is concerned with group relations, and combined harmonious behavior with willingness to work in a positive manner no matter who one's partners are. Willingness to behave harmoniously with everyone was the most highly ranked composite variable, particularly at the elementary school level.

Friendliness. This variable was similar to harmony, but concerned dyadic rather than group relations. Sub-items included contacting friends about school matters, helping sick or injured friends, playing with friends in free time, and interacting harmoniously with classmates. This composite was also of great importance at all three school levels, particularly in elementary school.

Concern over peer's work. This variable, of relatively minor importance, combined helping a peer weak in studies, and keeping one's peers on-task during class work. This composite also declined in importance in secondary school.

Clubs and teams. Experiences in formal groups are found at all school levels, but seem to be more central to the social life of secondary school pupils.

Communicating with peers. This variable combined pupil discussions of the future, talk about class work, and behavior in which a pupil counseled an emotionally troubled peer. This verbal cooperation increased in emphasis in secondary schools.

Helping. Helping (i.e. cleaning and volunteer activities; assisting the teacher or younger pupils) was only marginally more emphasized by high school teachers.

Group participation/loyalty. This composite variable included a wide range of behaviors, including classroom group participation and a constructive and conforming approach to such groups. Rankings of this composite were stable across school levels.

Diligence. Studying hard, being obedient and not troubling others were of lesser emphasis at all school levels.

Summary In absolute mean rankings, six of eight aspects of cooperation changed between school levels. Friendliness, harmony and attention to others' performance were emphasized more in elementary school. Clubs, teams, and personal communication with friends became more important in secondary school. Group participation/loyalty and diligence are viewed similarly at all three school

levels. A look at the relative rankings shows that harmony and friendliness are the most important aspects of cooperation at all three levels.

What do such findings say about socialization for cooperation? First of all, the prominence of the idea of harmony is striking as central to school ideology. The data also indicates that there are specific activities at school (which are part of the standard regimen throughout Japan) which foster cooperation, and that some of these activities are particular to specific school levels. The Japanese may systematically arrange experiences and teach values which foster an ideology of harmony, friendliness, helping, group loyalty, diligence, communication, teamwork, and attention to others' efforts. "Systematicity" must be proven in subsequent research, yet the aims of the centralized Japanese school system are as clearly stated for interpersonal norms and values as they are for academic curriculum.

Findings on Competition

Factor and cluster analysis suggested nine key aspects of competition among Japanese school pupils, as described below.

Seeking teacher attention. Combining two behaviors (raising hand to be called on and seeking [teacher permission] to do popular group or individual tasks), this

index was related to pupil attempts to gain teacher attention and privileges. This composite was significantly more emphasized by primary than secondary school teachers.

Being first. This composite, which included hoarding of class materials, or possessions, trying to get ahead of others on line or in access to limited food, and seeking to be called on in class, was important in elementary school, and of minor importance in secondary school.

Being fast. This form of competition was also more clear at the elementary school level. It included trying to progress in studies faster than peers, and prizing speed over quality of study.

Being in the best group. The importance of one's group or team getting the highest evaluation declined in importance the higher the school level. Only in elementary school was this compositive among the most emphasized.

Egocentrism. The strongest factor contained a group of items which suggested a pupil who focuses only on his/her self. Items included trying to be a standout in appearance, not reflecting on one's mistakes, stubbornly defending one's opinions, being disrespectful, and giving low evaluations of others. This composite variable was most important at the junior high school level.

Individual striving. Doing well in individual sports, in contests, and in besting one's own records were all part of a composite focusing on individual excellence. In general, these became more important in secondary school.

Rivalry. Rivalry concerning entrance examinations and test scores was stressed more in secondary school, particularly at the high school level. Within this composite variable, boasting about grades, selection of a specific individual rival, and refusal to help others differed little between school levels.

Grades. This composite included studying just for grades and attending preparatory schools (academic juku) and was emphasized most at the high school level. Rivalry in these two items is not as explicit as in the five rivalry items.

Looking better at others' expense. This composite consisted of hating to lose and being quick to correct others' mistakes. In both items, the pupil gains in self-esteem at the expense of someone else. Particularly in the case of hating to lose, this variable became more important the older the pupils.

Summary. Mean rankings of all nine composite indices of competition changed significantly between school levels. In elementary school gaining teacher attention, being fast, being first, and being in the best group figure most in competition. In junior high, competition takes on a different style. Along with one's individual achievements, personal shortcomings such as trying to stand out, stubborness, and lack of self-reflection, are all seen signs of competition. In high school, individual achievement,

rivalry and grades become central to competition, and the notions of being fast, first and in the top group become least important in teachers' definitions of competition.

How does this bear on the school socialization process? If we compare the content of competitive and cooperative behavioral items and composite variables, rarely are competitive items sanctioned behavior or formal activities. In the case of cooperation, many items described behavior or activities which are required of all students. In addition, it seems that there is an underlying negative tone to most of the competitive items. Meanwhile, cooperative items generally seem socially desirable.

The emphasis in elementary school on speed and being first are not formally sanctioned, but pupils can see that school resources are scarce and that the scarcest resource is time. So they find socially acceptable means of striving for speed or primacy. Small group activities at this age is strongly encouraged by teachers, and ties are reinforced in two ways: classes stay intact for at least two years, and since elementary schools are neighborhood-based social ties are reinforced after school. The elementary school teacher is regarded as a parental substitute and leader, so that the acknowledgement of the teacher is greatly prized at this age.

In junior high school competition shifts towards individual achievement, as classes become more impersonal and entrance examinations to high school loom ahead. It

also concerns indications that pupils are no longer good little children, and assert their own (contrary) will. Finally, the great pressure placed on students under the "entrance exam hell" in high school (Devos, 1973) may facilitate the emphases on grades and on seeing others as rivals.

Discussion

The investigation reported here scratches the surface of educational phenomena deeply rooted in the Japanese culture itself. It provides a useful start in this area by showing what teachers actually see as cooperation and competition in their schools. It is clear that the nature of both phenomena changes greatly over the school years. The degree to which they are a product of non-school factors, explicit or implicit curricula is one goal of our ongoing research.

A second set of research questions concerns the interplay of cooperation and competition in schools, and their meanings. It has been noted already that Japanese ideologically consider cooperation good and competition bad. This seems to differ from basic American conceptions of cooperation and comeptition. Educational sociologist Kataoka (1979) speculates that in the U.S. cooperation may be more pragmatic (two or three heads are better than one), while in Japan cooperation is a "moral imperative". Competition is in this way as American as apple pie, but the competitive Japanese may not actually like to compete

(K. Miura, personal communication, March 1984). If this speculation is borne out in subsequent research, we must then ask how a necessary evil (competition) can coexist with a moral imperative (cooperation).

Several explanations for this duality must be empirically examined. Cooperation in Japanese schools may serve the function of making life more bearable for the inevitable losers in academic competition. Kiefer (1970) offers another explanation, that the Japanese family becomes the locus of competition as the whole family unites behind the pupil's entrance examination preparations. In this manner, competition is "pushed out" of the schools. A third hypothesis is that competition in Japanese schools is channeled into between-group activities which involve within-group cooperation, and eliminate the need for individual rivalries.

For instance, Japan has a basically homogeneous populace, with very few minority pupils. Japanese values are relatively homogeneous, as everyone values education, thinks of themselves as middle class, and are willing to submit their children to stressful examination pressures. There is a fairly standard national consciousness concerning education---that it is good, that teachers are highly respected, and that schooling should be the complete focus of youth. People feel differently about education in Japan than they do in the U.S. Educational stories appear frequently on the network news; there is a national

educational television network beamed into every household and classroom. Finally, there is no discussion about making education a priority in Japan---it already is a high priority both locally and nationally.

We will not try here to offer solutions to American educators. Still, we can show how another system works. Then American educators can ask, "Is this what we want? Will we be willing to pay the price (not merely in dollar costs) of changing our ways? What do we want?" In this regard it is crucial to consider not only academic achievement but also the social costs and benefits of different educational arrangements. Our preliminary exploration of socialization issues such as cooperation and competition calls attention to the implicit curriculum, a neglected dimension of education. We hope that this kind of research will continue to mirror the Japanese schools. Perhaps then we American educators can better consider our own educational system as we begin to see our own reflection.

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Table 1

Cooperative Activity Questionnaire

We are American psychologists from the University of Michigan. Currently we are studying differences between cooperative activities of American and Japanese pupils. As part of this research we wish to ask your help concerning the question of how pupils in your classes perceive cooperative activites. Please choose 10 items from those below which you think are most indicative of "cooperativeness" among your current students. Then please rank these ten items, giving a "1" to the most representative item, and so on to a "10" for the tenth most indicative item.

Helps a peer weak in sports during group practice
Divides committee tasks or class tasks
Joins efforts in group rather than doing own thing
Studies hard
Prepares or does club activities actively
Keeps the school interior or classroom clean
Obeys school rules and behaves soberly
Does volunteer activities
Discusses studies or school advancement with peers
Mutually contacts friends about school matters
Listens well to what friends say
Supports group's opinion even when own ideas differ
Does group experiments or projects with friends
Friendly and harmonious with friends
Helps the teacher with his/her work
Actively participates in school government
Helps out younger pupils
Offers constructive opinions in class discussions
Counsels a friend who is emotionally troubled
Carries out group projects to completion
Plays with friends in free time at school
Participates/prepares on gym class/athletic meet team
Helps out sick or injured friend
Warns others when they stray from group task
Helps out peer weak in studies
Participates actively in cleaning/committee work
Helps others out after own cleaning work is done
Takes part in group serving/cleaning after lunch
Doesn't make trouble for friends during class
Gets along well no matter who one's partners are

Your schools location:
Village Town City (<1 million) City (>1 million) Tokyo
School type: Elementary Middle High School
Grade for which you are responsible: 1 2 3 4 5 6
Gender M F
Number of years of teacher training <3 3/4 >4

Table 2

Competitive Activity Questionnaire

(Identical instructions are given as in the Cooperative Activity Questionnaire)

Tries to eat faster to get lunch seconds quicker
Attends cram schools
Seeks teacher's praise
Sees peers as rivals concerning entrance exams
Excels in individual sports
Sees friends as rivals concerning test grades
Rivals the teacher
Boasts about one's grades to others
Seeks high evaluation in contests and exhibits
Has one particular rival among classmates
Is disrespectful of teacher and other adults
Is quick to correct any mistake by a peer
Seeks highest evaluation for one's team/group
Studies alone only; won't help others
Tries to stand out in clothing/possessions
Takes class toys/possessions for own use
Wants popular individual/group tasks
Seeks praise for best group cleaning job
Doesn't evaluate others' grades/deeds highly
Strongly self-assertive; stubborn about opinions
Hates to lose
Thinks of own class as best in sports/studies
Outdoes own records
Tries to be first on line, onto bus, into class
Concerned more with speed than quality of study
Raises hand to be called on by the teacher
Progresses faster in studies than others
Doesn't reflect on own errors
Takes lessons after school (abacus, music, etc.)
Studies only for grades

(Same demographic questions asked as in Cooperative Activities Questionnaire)

Table 3. Mean Rankings of 8 Cooperative Composite Variables and Their Sub-Items, and Tests for School Level Effects

Item (and loading)	Tot.		Elem		JHS		H.S.		F	P
HARMONY	11.0	(1)	8.9	(1)	12.7	(2)	11.9	(1)	19.24	<.0001
Gets along well with any partner (.65)	11.9		9.6		13.5		13.0			
Friendly and harmonious with peers (.31)	10.1		8.3		11.9		10.7			
FRIENDLINESS	12.2	(2)	11.3	(2)	12.9	(3)	12.5	(3)	4.05	<.05
Contacts friends about school matters (.50)	15.2		16.7		14.3		14.3			
Friendly and harmonious with peers (.31)	10.1		8.3		11.9		10.7			
Plays with friends in free school time (.77)	11.1		9.2		12.5		12.0			
Helps out sick or injured friend (.60)	12.1		11.0		12.7		12.9			
PEER'S WORK	17.0	(7)	15.9	(5)	17.1	(7)	17.9	(8)	12.62	<.0001
Warns others who stray from group task (.37)	17.5		15.6		17.8		19.1			
Helps out peer weak in studies (.38)	16.4		16.1		16.5		16.6			
CLUBS AND TEAMS	13.1	(3)	15.4	(4)	11.6	(1)	12.0	(2)	28.40	<.0001
Active in clubs (.31)	13.3		15.8		11.1		12.3			
Participates in gym/athletic meets (.60)	13.0		15.1		12.0		11.6			
PEER COMMUNICATION	16.6	(5)	19.6	(8)	16.3	(5)	14.1	(4)	80.17	<.0001
Discusses class/advancement with peers (.51)	16.9		19.9		16.3		14.4			
Counsels an emotionally troubled peer (.51)	16.4		19.2		16.3		13.8			
HELPING	18.1	(8)	18.0	(7)	18.7	(8)	17.7	(7)	6.73	<.01
Keeps the school and classroom clean (.30)	17.4		18.0		18.4		16.4			
Does volunteer activities (.34)	18.3		19.2		18.6		17.3			
Helps the teacher with his/her work (.31)	18.3		17.2		19.4		18.5			
Helps out younger pupils (.30)	18.1		17.8		18.3		18.4			
GROUP INVOLVEMENT	15.1	(4)	15.2	(3)	14.6	(4)	15.3	(5)	1.64	NS
Joins group rather than doing own thing (.63)	12.0		12.0		11.8		12.2			
Follows group decision though disagrees (.37)	12.6		13.9		10.8		12.4			
Does group experiments and projects (.38)	17.3		16.8		17.6		17.5			

Table 3

(Continued)

Item (and loading)	Tot.		Elem		JHS		H.S.		F	P
Active in class/school government (.51)	16.1		17.9		14.8		15.1			
Gives constructive discussion opinions (.42)	16.0		16.4		15.0		16.3			
Completes group projects (.60)	14.6		13.7		14.8		15.3			
Active in cleaning/committee work (.40)	14.2		13.2		13.9		15.2			
Helps others after own work done (.32)	18.2		17.6		18.4		18.5			
DILIGENCE	16.2	(5)	16.2	(6)	16.2	(6)	16.3	(6)	0.12	NS
Studies hard (.30)	18.4		18.3		19.1		18.2			
Doesn't make trouble for friends (.44)	15.5		15.5		14.9		16.0			
Obeys school rules and behaves soberly (.61)	14.7		17.8		18.3		18.4			

Notes. The loading on the composite variable's factor for each sub-item is given next to the item name. Unranked items were coded as "20". Relative rankings are given in parentheses next to means. All ANOVA dfs=2,573.

Table 4. Mean Rankings of 9 Competitive Composite Variables and Their Sub-Items, and Tests for School Level Effects

Item (and loading)	Tot.		Elem		JHS		H.S.		F	p
SEEKING TEACHER ATTENTION	14.1	(3)	10.6	(1)	16.0	(6)	17.9	(8)	55.89	<.0001
Seeks popular tasks (.63)	13.1		10.1		14.3		17.0			
Raises hand to be called on (.48)	15.3		11.3		17.8		18.9			
BEING FIRST	15.8	(7)	13.1	(3)	17.3	(8)	18.1	(9)	58.90	<.0001
Eats faster to get seconds quicker (.46)	16.3		14.2		17.2		18.7			
Hoards class toys/possessions (.37)	17.4		15.8		18.3		18.7			
First on line, into classroom, etc. (.59)	14.1		11.0		16.2		16.1			
BEING FAST	13.8	(1)	12.0	(2)	15.0	(3)	15.2	(5)	11.15	<.0001
Cares about study speed over quality (.41)	14.5		12.7		15.7		15.9			
Progresses faster in studies (.49)	13.1		11.4		14.3		14.5			
BEST GROUP	15.0	(5)	14.1	(4)	15.4	(4)	16.0	(7)	3.71	<.05
Seeks praise as top group in cleaning (.32)	17.7		17.2		18.0		18.3			
Seeks top evaluation for group/team (.44)	12.3		11.0		12.9		13.6			
EGOCENTRISM	14.7	(4)	16.5	(7)	12.8	(1)	14.5	(4)	20.69	<.0001
Disrespectful towards teacher, etc. (.67)	17.4		19.6		15.2		17.1			
Stands out in clothing/possessions (.64)	12.8		16.9		9.4		10.8			
Doesn't evaluate others highly (.39)	13.7		14.7		12.4		14.0			
Self-assertive and stubborn opinions (.58)	14.3		15.1		13.2		14.6			
Doesn't reflect on own mistakes (.69)	15.3		16.2		13.9		16.0			
INDIVIDUAL STRIVING	13.8	(1)	14.8	(5)	12.8	(1)	13.5	(1)	5.38	<.01
Excels in individual sports (.39)	12.7		13.0		12.2		13.0			
Contests/exhibitions evaluation (.33)	13.3		15.2		11.2		13.4			
Outdoes own records (.35)	15.5		16.3		15.2		14.4			
RIVALRY	15.3	(6)	16.1	(6)	15.5	(4)	13.6	(1)	7.94	<.0001
Rivals peers on entrance exams (.51)	14.8		17.3		14.0		11.5			
Rivals peers on test grades (.39)	11.6		12.8		11.8		8.9			

Table 4

(Continued)

Item (and loading)	Tot.		Elem		JHS		H.S.		F	p
Boasts about one's grades (.44)	16.7		15.7		17.9		16.8			
Has one particular rival (.40)	17.0		18.0		16.8		15.4			
Studies alone, not helping others (.68)	16.6		16.9		16.9		15.6			
GRADES	16.3	(8)	17.4	(8)	16.4	(7)	13.9	(3)	11.15	<.0001
Attends cram schools (.64)	17.9		18.5		18.2		16.1			
Studies only for grades (.60)	14.7		16.3		14.6		11.6			
LOOKING SUPERIOR	17.2	(9)	17.5	(8)	17.6	(9)	15.7	(6)	6.18	<.01
Is quick to correct peers (.31)	18.2		17.8		19.3		17.4			
Hates to lose [face] (.44)	16.1		17.3		16.1		13.9			

Notes. The loading on the composite variable's factor for each subitem is in parentheses next to the item name. Unranked items coded as "20". Relative rankings for 8 composites in parentheses next to means. ANOVA dfs=2,322.